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1896

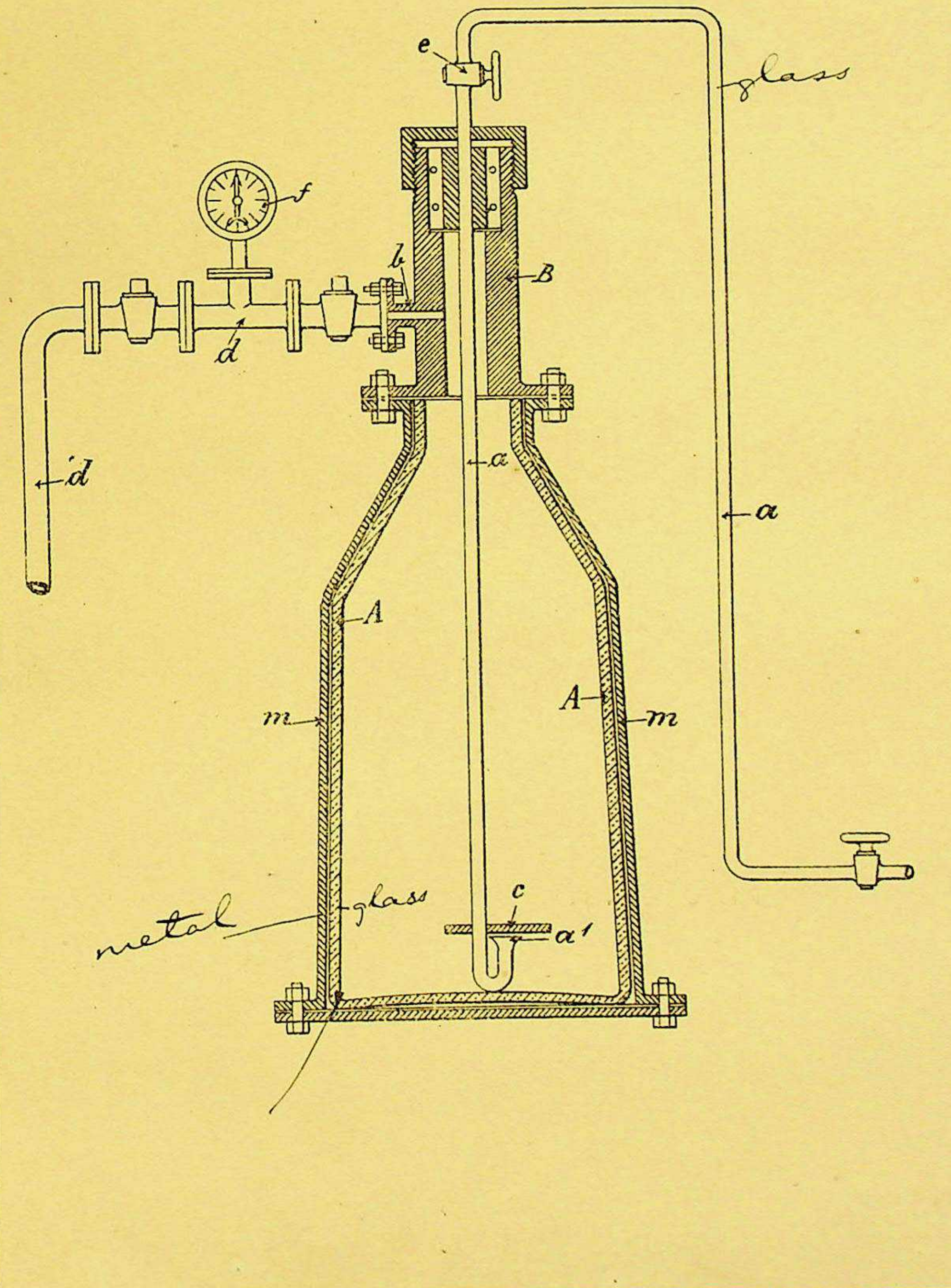
A.D. 1896. July 30. No. 14,501.

MÖLLER'S Complete Specification.

(1 SHEET)

r is added to still wine; fermentation
lace in glass vessel, A, surrounded by met
n; glass pipe, a, with upturned end to prevent
l coming off, delivers wine

Wines



[This Drawing is a reproduction of the Original on a reduced scale.]

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N° 14,501 A.D. 1896

Date of Application, 30th June, 1896—Accepted, 31st Oct., 1896

DUPLICATE

COMPLETE SPECIFICATION.

Improvements relating to the Manufacture of Sparkling-wine, and Apparatus therefor.

I, ADOLF MÖLLER of Berlin, in the Empire of Germany, Hotel-keeper, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement:—

This invention relates to the production of clear brilliant and sparkling wine corresponding completely to the French sparkling-wine, without any addition of fermentation exciters by means of natural fermentation in a short time, that is without any artificial addition of carbonic acid while also saving considerable cost in manufacture.

In a glass-bottle A with a cut off neck and containing about 200 liters or more the wine of which the sparkling wine is to be made is mixed with the necessary quantity of the finest sugar candy and the vessel is hermetically closed. The closing is effected by means of a metal-neck B, which on the top has an opening for the introduction of the out-let pipe *a* and on the side a flanged union *b* for the fixing of a pressure pipe. In order to fix this metal-neck and at the same time to secure the safety of the bottle under pressure, the latter is enclosed in a metal covering *m*, the bottom of which is fixed by a convenient number of screws. On the top of this metal-covering is fixed the metal-neck B by means of screws. The natural fermentation of the wine introduced in the bottle is effected at 16—25° C. without adding artificial fermentation exciters; it begins a few days after the filling and is finished in about a fortnight, a pressure of 5—6 atmospheres of carbonic acid being naturally produced. The sediment sinks to the bottom of the bottle *a* to a height of about 2 cm. and the wine is completely clear. After fermentation is complete the apparatus is placed in a cool place of not more than 10° C. and remains there 3—4 months in order to bring the fermented wine to maturity and improve its quality.

The bottle A is made of glass in order to avoid any inconvenient taste or influence, which might be effected by the fermented wine thus staying in this vessel.

The wine is drawn out through the glass-tube *a*, which is introduced into the bottle from above and reaches to its bottom and is there bent upwards, so that the opening reaches about 1 cm. over the surface of the sediment. The opening a^1 of this tube is enlarged funnel-like. At a small distance above the opening a^1 of the tube *a* there is provided a glass-plate *c* so that for a width of about 10 cm. round the tube *a* sediment cannot fall to the bottom. By the bending of the tube and the funnel like enlarging of the place where the wine enters it the sediment, which might be moved by the current will encounter the tube and its enlargement and fall thus to the bottom. Thus the penetrating of sediment into the tube is completely prevented and the wine runs clear and brilliant into the bottle to be filled for the use.

The delivery tube is of glass and provided conveniently above the metal neck with a melted-in glass-cock *e*: also the whole pipe up to its end is of glass; the cocks and tubes can be protected by suitable metal sockets and wire nets. The outflow is caused by the pressure effected by the fermentation on the liquid. As this pressure is diminished as the wine is drawn, it is kept up by addition of artificial carbonic acid, which is introduced through a pipe *d* arranged on the

[*Price* 8*d*.]

tube *b* and provided with pressure gauge *f*. It is impossible for the liquid itself to be affected by this artificial carbonic acid, as it is already saturated with an equal pressure of its own natural carbonic acid.

The amount of sugar to be added to the still wine varies with the amount of carbonic acid gas that is present. A desirable pressure is 5 atmospheres and for this pressure of carbonic acid gas to every 100 litres of wine, 2400 grammes of sugar are used, that is to say 2·4 *per cent*. This percentage however varies with any variation of the amount of carbonic acid used, that is to say, of the pressure of said gas to which the wine is subjected.

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is:—

1. Process for producing sparkling wine, in which still wine is placed in large bottles of glass containing about 200 litres with addition of pure sugar-candy without any other fermentation excitors, a natural fermentation and hereby the necessary carbonic acid being thus produced.

2. For use in the process described in Claim 1, a pressure vessel consisting of a securely closed glass bottle A surrounded by a strengthening covering *m* and provided with an outlet arrangement consisting of a tube *a* which reaching nearly to the bottom is bent upwards and enlarged funnel-like and above which funnel-opening a^1 is arranged a glass plate *c* for the purpose of drawing off the sparkling wine without sediment and without its acquiring undesirable taste, into the bottles for use.

Dated this 30th day of June 1896.

HERBERT HADDAN & Co.,
18 Buckingham Street, Strand, London, W.C.,
Agents to Applicant.

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